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General Accounting Office  
Washington, D.C. 20548

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General Government Division

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October 30, 1995

The Honorable James P. Moran  
Ranking Minority Member  
Subcommittee on Civil Service  
Committee on Government Reform  
and Oversight  
House of Representatives

Dear Mr. Moran:

We are responding to your request for a review of the report published by the American Legislative Exchange Council entitled America's Protected Class: The Excess Value of Public Employment (June 1994). The authors of this report, Messrs. Wendell Cox and Samuel A. Brunelli, conclude that federal civilian employees receive about 51 percent more in total compensation (salaries, wages, and benefits) over their careers than employees in the private sector.

The report's conclusions are at odds with those of other studies of federal versus nonfederal compensation. Three studies have reported that total federal benefits are more generous than those in the private sector, but federal total compensation (benefits plus pay) is less generous than that of the private sector because of lower salaries and wages.<sup>1</sup> These studies also identified more valuable benefits for private

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<sup>1</sup>The Office of Personnel Management (OPM) prepared an analysis of total compensation comparability in 1981 that indicated a federal pay increase of 8.8 percent was needed to ensure total compensation comparability. Similarly, a 1984 review of federal pay and benefits conducted by a private firm for the House Post Office and Civil Service Committee concluded that federal workers' total compensation was 7.2 percent behind private compensation. A 1995 study by the Congressional Research Service reported that federal employees under the Federal Employees Retirement System have a more generous benefits package but less total compensation than their private counterparts based on Bureau of Labor Statistics' data reflecting a gap between federal and private-sector pay.

sector employees in certain areas, particularly health care and executive perquisites.

The Carter and Reagan administrations proposed total compensation comparability, considering both wages and benefits, as the basis of federal pay policy. However, total compensation comparability has never been adopted. The current federal policy for fixing the pay of employees (as established under the Federal Employees Pay Comparability Act of 1990) is based upon ensuring pay comparability without consideration of benefits. Because benefits are included in their analysis, the authors' methodology differs from the current basis of federal pay policy.

The authors' finding of substantial overcompensation, if true, raises an important issue of government efficiency. To the extent that the federal government is either overcompensating or undercompensating federal employees, it is departing from optimum operating efficiency. If it is overcompensating its employees, the government is open to criticism for mispending public funds. If employees are undercompensated, the government may be disadvantaged in its attempt to hire and maintain the quality federal workforce needed to make the government work better and cost less.

It should be noted that the authors have engaged in a difficult methodological task. With respect to OPM's efforts over a decade ago to measure total compensation comparability, we observed that making benefits comparisons is much more difficult than making pay comparisons; benefits are numerous, complex, and difficult to measure; and many assumptions must be made.

Our objectives were to (1) describe the authors' methodology and (2) assess its validity in supporting the report's findings. To meet our objectives, we reviewed the report, examined other studies of federal compensation comparability, and interviewed the principal author, Mr. Wendell Cox. We received written comments on a draft of our analysis from Mr. Cox, and reproduced them in their entirety in enclosure I.

Our review is not exhaustive. Although we have examined the report's methodology and findings in substantial detail, we have not verified every calculation, all of the nonquantified factors, or all of the data used. Other studies are not directly comparable to the authors' study because they measured at different periods using different methodologies, and as a result we do not contrast these studies in detail here. To illustrate questions that our review of the authors' methodology raised, however, we do discuss some ways in which it differs from other methodologies. Finally, we have not examined the authors' comparison of state and local government employees with private employees.

SUMMARY

The authors' methodology is intended to estimate "excess value" by measuring the extent to which average federal compensation exceeds average private sector compensation. ("Excess value" is defined as the extent to which federal employees' compensation exceeds the market rate for comparable employees.) The methodology quantifies five factors, which represent areas of possible advantages for federal compensation. (As measured by the authors, these factors have larger values for the federal than the private sector.) It then multiplies these five factors by starting salaries, which the authors hypothetically set to be equal for a federal and a private sector employee. The resulting projection indicates a 51 percent greater compensation for a federal employee than for a private sector employee over a 40-year career. This "excess value" is calculated as \$586,000 by taking the difference between the career compensations. Excess value of federal compensation is then used to calculate the federal salary reduction, 33.7 percent, needed to equalize career compensations between the federal and private sectors.

We found that the methodological assumptions which drive the conclusions are not well supported. The authors do not address four key questions related to the validity of the study's methodology: (1) Does the methodology provide a reasonable basis for comparing equivalent positions across private and federal sectors? (2) Does the methodology represent a balanced approach to measuring both the compensation advantages and disadvantages of federal employment? (3) Is the assumption of equal starting salaries for the federal and private sectors reasonable? (4) Is the available evidence sufficiently compelling to assert advantages to federal employment in areas where comparisons between federal and private sector employment cannot be readily quantified?

Satisfactory answers to these key questions are crucial in assessing the methodology's validity. However, the authors' approaches seem questionable on conceptual and factual grounds: (1) Their methodology does not match similar federal and private sector positions for a comparison of compensation. Further, no justification is given for comparing the sectors in aggregate, especially given known differences between the sectors in occupational mixes. (2) Areas of federal employment disadvantages identified in other studies are not addressed. No justification is given for their approach to valuing federal benefits, which highlight certain aspects of value but not others. (3) The model's assumption of equal starting salaries in both sectors and the greater federal career salaries, as projected by the model, is not justified in the report. (4) The grounds are unclear for asserting that federal employees have additional advantages in areas such as productivity which, according to the authors, cannot be quantified because the necessary data are not readily available.

In his comments on a draft of our review, Mr. Cox elaborated on his methodology and said he believed that his underlying assumptions were both reasonable and conservative. He provided additional views on the appropriateness of comparing the private and federal sectors without adjusting for sectoral differences, of using a productivity factor for the federal sector without comparable analysis for the private sector, and of asserting advantages to federal employees in unquantified factors of compensation. We did not find convincing new evidence in Mr. Cox's comments, however, nor did we find the conceptual elaboration he provided to be persuasive that our assessment of the validity of the report's methodology and findings should be changed.

#### DESCRIPTION OF EXCESS VALUE METHODOLOGY

The authors' methodology is based on a model that attempts to track the different compensations of a private employee and a federal civilian employee<sup>2</sup> over a 40-year career, assuming the same starting wage rate. The difference in compensations is interpreted as "excess value," which is defined as the extent to which federal employees' compensation exceeds the market rate for comparable employees. The model is multiplicative; that is, five factors (with different values for federal and private sector employees) are multiplied by the same starting salaries to estimate career compensations for federal and private employees. These factors represent compensation areas in which the authors believe federal employees enjoy an advantage over private employees.<sup>3</sup>

The five factors in the model are:

1. Paid fringe benefits. Using the Bureau of Economic Analysis' data from the National Income and Product Account (NIPA), this factor is based on employer-paid fringe benefits calculated as a percentage of wages and salaries in 1991. Wages and salaries consist of monetary remuneration, voluntary employee contributions to certain deferred compensation plans, and certain receipts in kind. The employer-paid fringe benefits consist of employer contributions for social insurance (such as social security, hospital insurance, unemployment insurance, and temporary disability insurance) and other labor income (such as payments to private pension and profit-sharing plans, private group health and life insurance plans, and supplemental unemployment benefit plans).

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<sup>2</sup>According to Mr. Cox, they defined "federal civilian employees" to include all federal employees, including employees in government enterprises such as the Postal Service but excluding active-duty military personnel.

<sup>3</sup>Although they identified 17 advantages of public employment, the authors stated that they could only adequately quantify 5.

2. Paid vacation days and holidays. This factor is the ratio of annual work hours for private employees to those of government employees. Using Bureau of Labor Statistics' (BLS) benefit data and other published information, the authors estimate the number of paid hours for vacations and holidays over a 40-year career. According to Mr. Cox, they also adjusted this factor by sick days taken in 1991, based on another series of BLS estimates for both sectors.

3. Federal income-tax-free value of excess paid benefits. This factor is designed to measure the tax advantage to federal employees of receiving more benefits than private employees, given that benefits are an income-tax-free form of compensation. First, the authors estimated the different value of benefits in 1991 (assuming equal starting salaries but different rates of benefits to salary) between the two sectors. They next multiplied the difference by a tax rate (derived from 1991 tax tables and some assumptions about the filer's status). Finally, the factor for federal employees is calculated as the ratio of this product to the starting salary.

4. Compensation increases. To project the growth of total compensation (salaries, wages, and employer-paid benefits) over 40 years, the authors estimate annual growth rates separately for the private and federal sectors. The rate for private employees is based on the private sector's annual inflation-adjusted growth in total compensation from 1980 to 1991. The federal rate is based on the 40-year variance (1951 to 1991) of total compensation increases in the federal and private sectors. NIPA data on employers' cost of compensation per full-time equivalent employee, with Consumer Price Index adjustments for inflation, is used for both calculations.

5. Job security. This factor estimates the average value of job security for employees in the private and public sectors. It is calculated based on likelihoods of retaining (or losing) a federal or private job (data from the Current Population Survey), the associated salaries with the retained job or new job (BLS data for 1987 and 1991), and average time of unemployment (BLS data for 1992).

The sixth element of the model, starting salary, is hypothetically set at the same pay level for both private and federal employees. This starting salary is arbitrarily fixed at \$26,716, the average wage and salary on a full-time-equivalent basis for all private sector employees in 1991.

From this starting point of equal wages, adjustments are made for the first three factors (fringe benefits, excess paid nonwork days, and tax benefits for excess benefits). These adjusted wages are the projected compensations in the first year. Then, a constant factor of

annual compensation increases is iteratively multiplied by the projected first year's compensation to project compensation for each of 39 additional years. Finally, the sum of 40 years of compensation is multiplied by the fifth factor, job security.

At this point, the model provides accumulated estimates of career compensation for private and federal employees. These figures provide the basis for calculating the career "excess value," or difference in compensation over a career. The difference (the amount by which the federal employee's compensation exceeds that of the private employee) is calculated as \$586,000. Dividing this amount by the private employee's compensation (multiplied by 100) yields the excess value as a percentage, 50.8 percent. The authors then calculate "market wage adjustment needed," the percentage reduction in wages needed to equalize the greater career compensation of federal employees with the lower level of private employees. According to the report, a 33.7 percent reduction of federal wages is needed.

#### KEY QUESTIONS ABOUT THE METHODOLOGY'S VALIDITY

At least four key questions about the authors' methodology must be addressed before the report's analysis and findings can be accepted as valid. If the methodology cannot be shown to be valid, the report provides a questionable contribution to the debate over whether the total compensation of federal employees is ahead, comparable with, or behind that of their private sector counterparts.

##### 1. Does the Methodology Provide a Reasonable Basis for Comparing Equivalent Positions Across Private and Federal Sectors?

Comparability of compensation implies a comparison of the pay for workers doing similar jobs, with pay in the private sector assumed to represent the market wage for similar federal jobs.<sup>4</sup> An appropriate benchmark of market rate for a federal job could be established by either (1) using a methodology that matches comparable positions across federal and private sectors or (2) making a case that the private and federal civilian sectors have an equivalent mix of positions. In either case, comparing the compensation of similar jobs across the sectors is critical for asserting that the market rate of federal jobs has been validly measured. Without some assurance that a

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<sup>4</sup>The matching of federal and private sector jobs is the basis of the current federal pay policy. Although disagreeing with the current policy, the authors seem to agree with the underlying methodological principle. "The general consensus is that public employees should be compensated the same as private employees doing the same work..." (p. 1) However, some other researchers have attempted to address pay comparability by matching employee characteristics (such as education levels), sometimes without matching for jobs. Further, the current federal pay policy also assumes that locality may affect the going rate for a job. The authors' methodology does not include these and other factors that may affect the market rate for a job, and our review does not elaborate on these factors and approaches.

methodology validly measures market rate, the resulting comparability findings are left in doubt.

#### No Clear Basis for Comparing Similar Employees Is Provided

It is questionable whether the authors' methodology provides a valid benchmark for the market rate of federal employees' compensation. The authors do not directly match federal and private sector jobs in their analysis. Nor do they provide an explicit justification for their comparison of compensations in the private and public sectors.

Although Cox and Brunelli define excess value with respect to "the market rate for comparable employees who produce the same quantity and quality of work" (p.6), their methodology provides no matching of similar employees (or positions) to make this comparison. The only matching in their model is hypothetical, the assumed equal starting wage for the private and federal employee. However, the five factors --which drive their estimates for private and federal compensation to very different levels--are based on contrasting the total private sector with the federal civilian sector. Their methodology is thus questionable because it is comparing whole sectors rather than matched positions from the two sectors.

Without a methodology of comparing similar positions, the reasonableness of the sector comparison becomes crucial for the report's objective of measuring excess value. In practice, their methodology uses private-sector averages as benchmarks for federal employees' market rate of compensation. However, these averages are not clearly the appropriate benchmarks for the market rate in any particular industry. Since average compensations in particular private industries fall above or below the private-sector average, one would have to conclude that all private industries are overcompensating or undercompensating their employees relative to this benchmark of market rate. Yet one would hesitate to draw this conclusion because differences between industries--such as average education of employees, mix of occupations, and locations--can affect the market rate of compensation. Thus, there is no inherent reason that the average compensation for all industries will be the market rate for any particular industry--including the federal government.

#### Contrary Evidence about Comparability of Positions Not Addressed

The report fails to address evidence showing that federal and private-sector labor forces differ in their composition. According to the 1995 (first quarter) Current Population Survey, for example, 79 percent of federal civilian employees are in the white-collar positions of managers, professionals, technicians, and clerks. In contrast, 44 percent of private sector employees are in such positions. BLS surveys of pay comparability for these white-collar positions have shown that fewer matches with federal white-collar positions exist in smaller private establishments than in larger ones,

and the matches in smaller establishments were predominantly in clerical positions. These differences are important because BLS' surveys of nonfederal employees' benefits show that both the likelihood of coverage and level of benefits differ by such factors as occupation and size of establishment. For example, compared to full-time employees in small establishments, those in medium and large establishments are more likely to be covered by at least one retirement plan and have, on average, more days of vacation; in small establishments, white-collar employees are generally more likely to receive formal paid time-off benefits than blue-collar employees.

In sum, the authors do not provide a convincing argument that the average compensation in the private sector is a valid benchmark of the market rate for federal employment. Without such an assurance, differences between private and federal sectors' compensation could reflect simply the appropriate market rates in two sectors with different worker characteristics and positions rather than the excess value of federal compensation, as the authors claim.

## 2. Does the Methodology Represent a Balanced Approach to Measuring Both the Compensation Advantages and Disadvantages of Federal Employment?

An analysis that focuses only on the advantages for public employment raises questions of balance. On the one hand, such an analysis of public employment advantages would be appropriate if no relative advantages existed for private employment. On the other hand, measuring areas of public advantage only--if areas of private advantage exist--will overestimate federal compensation compared with private compensation, and will allow for no other conclusion than that federal compensation exceeds private compensation.

### Areas of Possible Private Sector Advantage Not Addressed

One indication of balance would be to address the areas of advantage for private employment identified by past studies and debates over compensation comparability. For example, the authors identify the tax advantage of greater fringe benefits that they associate with public employment, but do not identify the tax advantage of Social Security compared with the Civil Service Retirement System (CSRS), a major federal retirement system that excludes Social Security benefits. This is significant because Social Security benefits, which private sector employees earn, are tax free (within limits depending upon the taxpayer's other income), whereas CSRS benefits are taxed as ordinary income. The authors need to explicitly address such areas.

### Approach to Valuing Factors Requires Justification

A second way to ensure balance is to maintain a consistent and adequate approach to assessing market rate. One major approach to valuing benefits is to measure employers' cost; this approach has been



criticized by some for neglecting the fact that two employers with the same benefit costs may provide different levels of benefits to their employees, depending on factors such as workforce characteristics and funding methods. Another major approach, the level-of-benefits approach, overcomes these criticisms. It compares the provisions of actual benefit programs, rather than their costs, and then determines what it would cost the government to provide the same benefits to federal employees as provided to similar private sector employees. If employees also contribute toward the cost of providing benefits, the costs to the employer could be allocated based on a contribution ratio. Still other valuations might focus on either the value or cost of benefits to employees. Since the selection of an approach can affect the findings, the authors' selection requires some justification, particularly when the approach has known criticisms. Their use of a mix of approaches requires further justification since the inconsistency of approach could result in an unbalanced comparison.

The authors use both the employer cost and employee value approaches to valuing benefits. As examples of the employer cost approach, they measure paid fringe benefits and compensation growth by employers' costs. (They do not attempt to measure the level of benefits to employees across sectors.) However, levels of value may be different. A 1984 study adjusted the value of federal retirement benefits downward because under CSRS (which currently covers about as many federal civilian employees as the other major federal retirement system), a given level of benefit is more costly than under private retirement systems. This is due, at least in part, to legal limitations placed on the investments of the CSRS retirement fund. In addition, the employer cost approach neglects the fact that, according to some studies, employee contributions to retirement, health benefits, and life insurance tend to be higher in the federal sector. As an example of the employee value approach, the authors value job security based on an estimate of value to employees, rather than on employer cost. This approach ignores the fact that the market wage likely reflects the value to the employer of having an experienced and continuous workforce, as well as the security value to the employee. If the value to the federal employer is equal to the value to the employee, then one would not interpret this situation as one of excess value. To ensure a balanced analysis, the authors should justify their approach(es) to valuing the compensation factors so that their study does not appear to selectively highlight federal advantages.

### 3. Is the Assumption of Equal Starting Salaries for the Federal and Private Sectors Reasonable?

Any comparison of total compensation, by definition, is comparing the sum of pay and benefits across the federal and private sectors. Since pay is typically the larger proportion of total compensation, it can have a major impact on the comparison. For example, the pay comparison was pivotal to the findings in some other total

compensation studies: more generous federal benefits were more than offset by less generous federal pay. A valid comparison of compensation would have to accurately measure both relative pay and benefits across the sectors.

The authors provide no support for the reasonableness of their assumption of equal starting salaries. They present no facts about starting salaries. They cite pay-comparability studies, but these studies treat average, not starting, salaries. Moreover, although these studies offer highly divergent findings, none report that average salaries are equal.

The superiority or inferiority of federal salaries relative to private salaries is controversial, and different assumptions about starting salaries can substantially affect the model's findings. Using the disparate findings from two pay comparability studies (which indicate that federal employees' average salary is 22.3 percent less and 3.1 percent more than their private counterparts), the authors report the required federal wage reduction would respectively be either 14.7 percent or 35.7 percent, a difference of 21 percentage points.<sup>5</sup> Based on average salaries in the two sectors, they also estimate a needed 49.6 percent federal wage reduction. Depending upon which of these estimates of average salaries are used as starting salaries, up to 35 percent of federal compensation (the range between 14.7 and 49.6 percent as measured by the authors' model) would, or would not, be considered above market rate.

Without evidence to support the use of equivalent starting salaries, the accuracy of the authors' estimate of excess value is questionable. Although equal starting salaries may appear a neutral starting point, salary estimates have a strong impact on the findings. Different compensation growth rates in the model result in federal salaries being 13.5 percent greater than private salaries over a 40-year career. As a result, salary differences account for over a quarter (\$152,700 of \$585,833) of the federal excess value estimated by the model. Given the sizeable impact of salary estimates on the findings, the need for a justified rather than arbitrary set of starting salaries becomes evident.

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<sup>5</sup>Whether average salary gaps should be used to adjust starting salaries or, alternatively, career earnings in the model, is a debatable but consequential decision. The authors reestimate market wage reductions by adjusting the starting salaries based on average salary gaps found in the pay comparability studies. The career salary differences are then the result of differential growth and starting salaries in the model. For example, when starting federal salaries are reduced 22.3 percent in the model (to conform to the average gap found in one pay comparability study), the federal salary disadvantage over a career becomes a lesser percent, 11.8, due to the projected greater salary growth for federal than private sector employees.

4. Is the Available Evidence Sufficiently Compelling to Assert Advantages to Federal Employment in Areas Where Sector Comparisons Cannot Be Readily Quantified?

Citing their ability to quantify only 5 of the 17 advantages they attribute to public employment, the authors assert that their estimate of the public advantage reflects only a portion of a larger, but difficult to measure, public advantage. However, the grounds are unclear for asserting that federal employees have additional advantages in areas where, according to the authors, the comparison cannot be fully quantified because the necessary data are not readily available. The presented evidence would have to be analyzed to see if the assertion is compelling.

Comparisons Should Be Based on Data From Both Sectors

The authors' treatment of productivity illustrates a weak analysis due to the lack of comparable data from both sectors. They acknowledge the lack of comprehensive information. Nevertheless, they derive an additional factor of federal productivity from the Clinton administration's intention to reduce the federal civilian workforce by 12 percent without lowering performance. The authors suggest that this reveals an even larger excess value for federal employees than indicated using the five fully quantifiable factors. With the addition of this productivity factor, they reestimate federal excess value to be at least 71 percent rather than 51 percent. This higher level of federal excess value requires a 42-percent reduction of federal salaries instead of 34 percent.

Their analysis is not a balanced comparison, and their conclusions based on the productivity factor are therefore questionable. Since the report considers no comparable indicator of private productivity, it is uncertain how federal productivity compares with the private sector's. The downsizing of many corporations in the last decade has been well publicized, and might suggest a similar productivity problem in the private sector during the comparison period. For a balanced analysis, private and federal sectors must be given equal scrutiny.<sup>6</sup>

Another assumed federal employment advantage is also presented without the balance of data on the private sector. Data on private severance pay would have to be compared before judging whether federal severance pay is particularly generous. Moreover, a more informative comparison

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<sup>6</sup>To the extent that downsizing is driven by cost-cutting rather than productivity concerns, the authors' interpretation of a direct relationship between downsizing and productivity is also open to question. Also note that the observation about downsizing could be interpreted in opposition to the authors' thesis; downsizing efforts have reduced federal job security, and the authors' estimate of a federal advantage in this area must be decreased or even reversed. However, without comparable data on both sectors, this interpretation too would be driven more by assumptions than fact.

would contrast formulas for severance pay rather than the maximum severance. The maximum federal severance pay, which is 1 year rather than the cited 2 years of pay, can be a misleading indicator of actual severance pay. For example, a federal employee under 40 years of age could not possibly be eligible for this maximum because it would require 31 years of federal service.

Federal Employees' Compensation Cannot be Assumed to Be the Same as State and Local Government Employees'

Several other presumed but unquantified public employee advantages may, in fact, be more advantageous to private than federal sector employees. The authors' support for some assumed advantages--such as more paid personal days and work weeks with fewer hours--pertain to state and local government employees. It can be misleading to use state and local government data to imply federal advantages.

Available evidence suggests that these are not federal advantages. Personal days for federal employees are already quantified in the model (included in annual leave days); a balanced comparison would include any paid personal days in the private sector. This would reduce rather than increase the measured federal employee's advantage in paid nonwork days. With respect to work hours, OPM's work on total compensation in 1979 and 1980 suggested that federal employees have slightly more scheduled work hours than the average in the private sector. Compared with the average 40-hour scheduled work week of full-time federal employees, BLS' estimates of full-time employees in 1992 and 1993 indicate more private sector employees are scheduled with fewer hours than are scheduled with more hours.

Other Considerations May Change the Perspective on Advantages

Several unquantified advantages with regard to retirement require some additional context for a balanced consideration, in particular consideration of prior federal retirement reform and the role of Social Security in private sector retirement. Although federal employees can apply their unused sick leave credit to length of service for annuity calculation purposes under the federal retirement system that is now closed to further enrollment, federal employees entering the government after 1983 are not permitted this retirement feature. Thus, the hypothetical employee in the authors' model, who starts federal employment in 1991, would not have this advantage. (Neither of the major federal retirement systems allow employees to be paid for unused sick leave or to advance their retirement dates on this basis, in contrast to this advantage for some public employees cited by the authors.)

Consideration of Social Security also leads to less contrast in a comparison of federal and private sector retirement benefits. Company-provided retirement plans are typically coordinated with Social Security. The authors contend that public employees are

typically covered by more expensive, defined-benefit retirement plans, whereas only 39 percent of private employees are covered by this type of plan. However, nearly all civilian payrolls are covered by Social Security, which is a defined-benefit plan. The authors also indicate that few private sector employees receive the pension benefit increases received by more than half of public sector retirees. This again ignores the Social Security portion of private sector retirement. Social Security benefits are fully indexed to inflation.

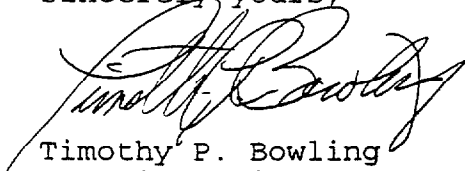
In sum, the authors' contention that their estimate captures the minimal size of federal excess value is questionable. Although areas lacking comparable data for federal and private sector employment could or could not constitute advantages for federal employees, neither conclusion is compelling given insufficient data to demonstrate the point. In some areas that the authors cite as federal advantages, the available evidence suggests the opposite.

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This review was prepared by Terry Hanford, Evaluator-in-Charge, and Larry Endy, Assistant Director. A copy is being sent to the Chairman of the Civil Service Subcommittee, House Committee on Government Reform and Oversight, and copies will be made available to others on request.

I hope this information is helpful to you. Please call me on (202) 512-3511 if you have any further questions.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Timothy P. Bowling". The signature is fluid and cursive, with the first name "Timothy" being more prominent.

Timothy P. Bowling  
Associate Director  
Federal Management  
and Workforce Issues

COMMENTS FROM MR. WENDELL COX**WENDELL COX CONSULTANCY**

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**AMERICA'S PROTECTED CLASS:  
THE EXCESS VALUE OF PUBLIC EMPLOYMENT  
COMMENTS ON GAO REVIEW**

October 19, 1995

**Summary**

Federal non-military employee compensation is determined by methods that fail to quantify important elements of value (employer paid benefits, paid time off, and higher annual compensation increases). With respect to each of these excluded elements, federal employee compensation generally exceeds that of private employees. *America's Protected Class: The Excess Value of Public Employment*<sup>1</sup> (APC) estimates the value of the excluded elements and identifies an inherent premium ("excess value") for federal employees of 50.8 percent relative to comparable private employees. This excess value factor can be applied to any assumption of federal-private compensation comparability to estimate the variation of federal employee compensation from the market. These comments document the reasonableness of our approach.

However, in the final analysis, no administrative system can reliably determine any market price, including employee compensation. Nonetheless, an administrative system (such as the federal system) that intentionally excludes elements of value will be even less reliable. Fairness to the taxpaying public requires that federal employees not be compensated at above market rates. To achieve this objective, the federal government should rely to the maximum extent on competitive market alternatives (competitive contracting and privatization). Where market approaches are not used, the federal government should genuinely seek to replicate market compensation rates by valuing all elements of compensation and by adjusting the results to achieve turnover rate parity with the market.

**Background**

The federal employee compensation determination system is intended to establish federal employee compensation at market rates for similar work in the private sector. But the system quantifies only wages and salaries and excludes other significant elements of compensation such as employer paid benefits and paid time off. *America's Protected Class: The Excess Value of Public Employment* attempts to estimate the value of elements excluded from federal compensation determination.

In response to my Congressional testimony, Congressman James F. Moran asked the General Accounting Office (GAO) review our research. This document provides our response to the GAO analysis. (A more detailed analysis will be provided in a forthcoming paper.) Many of GAO's comments are constructive, and we have provided the justifications suggested by GAO.

**The Federal Pay Determination Method is Flawed**

Market prices, including market rate employee compensation, cannot be reliably determined through administrative processes. As Nobel Laureate Frederik Hayek cautioned that the competitive price cannot be

<sup>1</sup> Wendell Cox and Samuel A. Brunelli, "America's Protected Class: The Excess Value of Public Employment," *The State Factor*, American Legislative Exchange Council (Washington: June 1994).

known until there is competition. Indeed, the inability of Soviet planners to reliably establish market prices --- even after 70 years --- produced gross economic misallocation that contributed heavily to the collapse of that economy.

Even so, administrative methods for estimating market compensation rates will be even less accurate if they fail to account for readily quantifiable elements of value. This is the case of the federal government, which bases its civilian employee compensation determination entirely on wages and salaries. Wages and salaries represent only 75 percent of employer paid compensation for federal non-military employees (federal civilian employees and federal government enterprise employees [primarily US Postal Service employees]) and an even smaller percentage when adjusted for paid time off.

The federal Office of Personnel Management (OPM) has estimated that, on average, federal civilian wages and salaries are 22.3 percent below that of comparable private employees --- this is referred to as a "pay gap." In contrast, academic reports typically report a federal wage and salary premium. (GAO dealt with this in a December 1994 report.)

If federal pay systems produced results consistent with labor market outcomes, then average employee tenure (period of employment with the current employer) among federal non-military employees would be similar to that of comparable employees in the private sector. The composition of the federal work force justifies a slightly higher average tenure than the private sector average, but nowhere near the actual difference --- federal employee tenure has been estimated at up to three times that of private employees. This is a strong indicator that federal non-military employee compensation is well above market rates.

The federal government is not subject to the competitive market. It does not have to compete for revenues against other entities offering the same products to consumers. It cannot be challenged by new entrants, nor does it face liquidation as a penalty for failure in the market. Unlike firms in the competitive market, the federal government can afford to pay above market employee compensation, because it can compel taxpayers to pay, unlike private entities.

Average federal non-military compensation was 45 percent higher than average private employee compensation in 1991 (wages, salaries and employer paid benefits). If federal non-military wages and salaries were raised to eliminate the claimed "pay gap," the average federal non-military employee's total compensation would exceed that of the average private full time employee by more than 75 percent.

#### **Estimating the Excess Value Factor**

The research developed an "excess value factor," which when applied to assumed level of federal wage and salary comparability would provide a reasonable estimate of the total compensation value for federal non-military employees compared to that of comparable private employees.<sup>2</sup> Again, however, only the market can reliably establish market rate compensation.

Using a hypothetical case, we estimated the extent to which inherent differences between private and federal non-military employment impacted the value of total compensation (wages and employer paid benefits adjusted for hours worked). The elements analyzed included employer paid benefits; paid holidays, vacation days, and sick days; the federal income tax free value of the higher employee benefits, higher compensation increases, and the relative value of job security over a 40 year employment career. To calculate the excess value factor, it was necessary to use hypothetical private and federal non-military

<sup>2</sup> If the excess value factor had been found to be less than zero, then federal non-military employees could be considered to be under paid relative to market rates. Evidence of such a situation would be much higher turnover rates, the opposite of the present situation.

employees who started at the same wage rate (this is different from assuming that federal and private wages and salaries are the same for comparable positions). The excess value factor can be applied to any assumption with respect to a federal non-military employee "pay gap" or pay premium to estimate the extent to which federal employee compensation differs from market rates. The resulting excess value factor was 50.8 percent.

#### **The Assumptions are Reasonable and Conservative**

Questions have been raised with respect to the appropriateness of using aggregate private sector data for comparison of employer paid benefits, paid time off, and salary increases. While federal civilian employment includes a larger percentage of "white collar" than the private sector, it does not necessarily follow that such a work force composition would command higher compensation factors in the market. Moreover, unlike previous studies, ours included both the federal civilian work force and federal government enterprise employees (overwhelmingly US Postal Service employees). This combined federal non-military work force is more similar in composition to the private work force than the federal civilian work force alone. A large percentage of federal non-military employment are administrative support and clerical employees, who account for twice the share of federal non-military employment as private sector employment. In the market, compensation for administrative support and clerical employees is less than the private sector average. Differences in the composition of federal non-military employment relative to private employment are not sufficient to account for the much higher compensation received by federal employees.

- The composition of the federal work force justifies virtually the same combined employer paid benefits and paid time off costs (as a percentage of wages and salaries) as is typical of the aggregate private work force.
- The composition of federal non-military employment justifies a slightly higher annual increase rate relative to the private employee average. However, from 1980 to 1991, federal non-military compensation increased at four times the justified differential. We used an overly conservative compensation increase assumption, which could have been increased by the justified higher federal increase without materially altering the results (see APC footnote #40).

Further, an average federal tax rate was used to calculate the tax free value of higher federal employer paid benefits. Use of a marginal tax rate would have been justified, which would have increased the excess value factor. The federal cost of paid time off other than vacations and holidays is nearly 2.5 times the private sector rate, and use of this element would have increased the excess value factor. The estimate of the value of job security was consistent with our employer cost approach in that job security is valued in terms of employer's paying compensation.

In sum, the methods were reasonable and conservative.

#### **Productivity**

The assumption with respect to productivity potential is also both reasonable and conservative. For the purposes of the research, productivity was defined in terms of the number of employees. The reference point was not optimal productivity, it was market productivity. The market influences productivity toward optimal levels but succeeds more or less based upon a number of factors, especially the extent of competition in the particular industry. The extent to which market (private) productivity diverts from optimality is irrelevant to this analysis.

Market productivity cannot be reliably achieved outside the market. That is why public policy requires regulation of private monopolies. Government is a monopoly but is not subject to the quasi-market



mechanisms of regulation. Competitive enterprises tend to be more productive than non-competitive enterprises for very fundamental reasons -- Customers may choose from alternative providers, and new providers may enter the market at any time. This creates powerful incentives to minimize costs; these incentives simply do not exist in non-competitive environments.

The estimate of productivity improvement potential is conservative. It is considerably less than the parallel estimate for state and local government productivity improvements, which is based upon comparative inter-governmental data (such data is not available for the federal government). Further, the Clinton Administration's "Reinventing Government" initiative has cited the difficulty of discharging federal employees as a significant hindrance to productivity. Finally, much greater productivity improvements have been readily demonstrated, especially through competitive contracting and privatization.

#### **Other Factors**

We cited other factors as generally advantageous to public employees (state and local government employees as well as federal employees), but specific calculations were not provided. Of course, not all of these additional factors apply to federal employment, and calculation of a particular factor could produce private, rather than federal, advantage. GAO notes that we should have included the tax free nature of some social security income, and the likelihood that private employees enjoy an advantage because most federal retirees do not receive social security income. Others have noted that we did not include the value of unfunded federal civilian pension liabilities (\$0.9 trillion), which arise from the federal government's failure to fully fund its pension obligations. The Employee Benefit Research Institute estimates that amortization of this liability over 40 years would increase the federal civilian payroll 31 percent relative to wages and salaries.<sup>3</sup> If this pension liability had been funded currently, it could have added 15 percent to overall federal non-military employee compensation costs. (The federal civilian unfunded liability is more than \$250,000 per employee, which compares to less than \$1,000 in the private sector.) Inclusion of both factors would have strengthened the presentation.

It is likely, however, that the additional factors cited, but not quantified, would increase the advantage of federal employees. Virtually all federal employees are eligible for severance pay compared to less than 40 percent of private sector "white collar" workers. In the 40 states with income taxes -- which comprise more than 80 percent of the population -- the excess employer paid benefits represent a further tax free value to federal employees. In states comprising more than 25 percent of the population, federal (and state) employee pensions are exempt from state income taxes, unlike private pensions. And while Social Security is a "defined benefit" plan, the private sector pensions that supplement social security are, unlike federal pensions, typically not the more lucrative "defined benefit" plans, and increases occur less frequently (if at all).

#### **Federal Pay Determinations Systems Must Be Corrected**

Our results are reasonable and conservative relative to labor market outcomes. A 1982 study estimated the extent to which federal employee wages and salaries would need to be reduced to achieve balance between the supply and the demand for federal jobs (another way of estimating market compensation).<sup>4</sup> Applying federal employee composition-weighted relative compensation increases (1982 to 1991) to this study yields an excess value factor of 55.0 percent -- somewhat above our estimate of 50.8 percent.

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<sup>3</sup> *ERBI Databook on Employee Benefits*, Employee Benefit Research Institute (Washington, DC: 1995).

<sup>4</sup> Steven F. Venti, "Wages in the Federal and Private Sectors," David A. Wise, editor, *Public Sector Payrolls*, University of Chicago Press (Chicago, IL: 1987).

It is not sufficient to rely on job comparisons as is the federal methodology. Routine and comprehensive reference checks are required to ensure that federal labor outcomes balance with labor market outcomes. Federal systems exclude quantifiable elements of value; therefore, they are not objective mechanisms for setting federal non-military employee compensation.

The financial conclusions of our report are simply stated. The excess value of federal non-military employment is estimated at 50.8 percent. This means that:

- If it is assumed that a federal employee's starting salary is equal to that of a comparable private employee, the excess value would be \$586,000 for the hypothetical federal employee.
- If it is assumed that a federal employee's starting salary is 3.1 percent above that of a comparable private employee,<sup>5</sup> then excess value would be \$640,000 for the hypothetical federal employee.
- If it is assumed that a federal employee's starting salary is 22.3 percent below that of a comparable private employee (the President's Pay Agent "pay gap"), the excess value would be \$261,000 for the hypothetical federal employee.

Only if it is assumed that a federal employee's starting salary is 33.7 percent or more below that of a comparable private employee would there be no excess value for the federal employee. And, if federal employee compensation were truly below market rates, there would be an insufficient number of applicants to fill federal jobs. This is not the case.

Of course, the excess value factor would change if the assumptions in the model are changed. For example, four of the proposed adjustments above (federal work force compensation increases, marginal income tax for excess employer paid benefits, higher federal paid leave, and the private advantage in tax-exempt social security) would change the excess value factor to 48.2 percent — not a material difference from our 50.8 percent estimate. Addition of the unfunded pension liability would substantially increase the excess value factor. *America's Protected Class: The Excess Value of Public Employment* is an initial attempt to estimate the value of compensation factors that are ignored by the federal system. It is anticipated that subsequent research will refine the approach.

Administrative pay determination systems (including our approach, the present federal approach, a more objective federal approach, or any other approach) cannot reliably estimate market rates of compensation. However, in the absence of market competition in federal functions, federal pay determination systems should be revised to fully account for differences in employer paid benefits and paid time off. And, compensation should be further adjusted based upon the reference check of market rate tenure.

But at this time, the extent of the federal employee compensation premium is virtually unknown. The federal pay system revisions proposed above are necessary to ensure that taxpayers and consumers are not paying more than necessary for federal services. No less is required in view of the imperative to balance the federal budget.

Submitted by Wendell Cox with the concurrence of Samuel A. Brunelli

The disclaimer in the original paper applies to this response. That disclaimer reads, in part: "Nothing written herein is to be construed as necessarily reflecting the view of the American Legislative Exchange Council..."

<sup>5</sup> Uses the federal pay premium in Brent R. Moulton, A Re-examination of the Federal-Private Wage Differential in the United States, " *Journal of Labor Economics*, 1990 (Vol. 8 No. 2).

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